



Concrete Houses

and Why to Build Them

"Concrete for Permanence"

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One Thing Lacking

Man builds a stately mansion in which he hopes to dwell, until the village churchbells are ringing forth his knell. He says, "By Caesar's whiskers, I will not count expense; I want to have the slickest and smoothest residence that any man can build me; I want to point with pride to everything outside it, to everything inside."

He builds that gorgeous palace, and paints it red and green; it is the richest wigwam that he has ever seen. It has some daubs by Titian and Rembrandt on the wall, a furnace in the basement, cigar stand in the hall. It is the richest dwelling for miles around, I guess; but, since it isn't fireproof, it isn't a success.

The architect advised him to go in less for show, and for fireproof inventions expend a roll of dough; but no, he couldn't see it, he wanted a display, and fire would never bother around him, anyway. And so he has a palace that only needs a spark to spread it round in ashes upon his well-kept park; and now this fact disturbs him and causes him distress: the house that isn't fireproof is scarcely a success.

There is a nifty parlor, there is a sleeping porch; a building with its autos, in which a man may scorch; there is a noble kitchen in which domestics toil, and there are costly ranges, on which the kettles boil; there is a bin for raisins, a bin for hazelnuts, there is a butler's pantry, in which the butler butts; there is an elevator, there is a billiard room, and fine electric fixtures dispel the evening gloom; the works of old Nick Carter are on the library shelves, but still the lord and master, who in their pages delves, that there is something lacking will oftentimes confess: the house that isn't fireproof is not a big success.

He wishes now his conduct had been more circumspect; he wishes he had listened to Mr. Architect. By day he is uneasy, his sleep has lost its charms, he dreams of hooks and ladders and clanging fire alarms. And to his wife he mutters, "Jemima Susan Bess, the house that isn't fireproof is never a success."

By WALT MASON

Concrete Houses and Why to Build Them

What a House Should Be

To many persons a house means "Home." To every right-thinking person a home is more than a mere house. When we build a home we usually think that we have finished one of our life's dreams. But some of us have realized, in looking at our home, that all we built was a house.

A home must furnish comfort, must give pleasure. We would hate to think that our health would not be safeguarded in our home—we would want it to be sanitary. We would not like to think that our home would be an easy prey of fire and decay, that the realization of our dream would perish, either by rot or fire. We would like our house to be so built that it would be cool in summer and not hard to heat in winter, thus securing comfort and profit from these combined qualities. If we have built truly fireproof, we need not insure the house; and, if it is fireproof, a low insurance rate on its contents may be secured—more profit and security from our wise choice. If built of the right material it will be vermin-proof and ratproof.

Contrary to the impressions of many people, concrete is not a "substitute" building material. It possesses individuality. It can be used wherever—and for whatever purpose—any of the other common house-building materials have been or can be used. Concrete stands for all those qualities which we have just summed up as desirable for our home.

Thomas A. Edison says: "Concrete is the best of all building material."

Why to Build of Concrete

Some persons have a wrong idea as to what constitutes a concrete house. Buildings with walls of wood frame covered with stucco, or buildings having concrete walls, yet floors, partitions and roofs of wood, are concrete houses only in part. Such structures are better than all-frame houses, but they are not strictly vermin-proof, not completely sanitary, contain portions that are subject to



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decay, and are not entirely fireproof. Insurance rates on such houses are no lower than for brick houses of ordinary construction.



Concrete cannot rot. It is sanitary, vermin-proof, ratproof, cyclone-proof and fireproof. A concrete house needs no painting nor any of the other repairs and maintenance necessary to impermanent construction.

Concrete houses represent the true investment side of home building.

Cost

Concrete houses are not necessarily more costly than all-frame construction. Sometimes they are notably cheaper in first cost than any other type built after the same general plans, while in final cost there is no comparison. The security of perfect fire-safeness and the complete elimination of annual repair expenses make the concrete house a perpetual source of profit.

Architectural Possibilities

Concrete is a very adaptable material. Concrete houses can be designed by competent architects and engineers so that they will pleasingly represent almost any admired type of architecture. Any interior arrangement desired is readily adapted to concrete design.

Trim and Finish

Wood window frames, doors and other interior trim may be used in concrete houses, but metal trim, and fireproof window frames, sash and doors are preferable. Wood floors may be laid on top of concrete floors, or linoleum may be used in a similar manner; but the concrete floor, properly finished, is best. It may be built so that



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very pleasing surface finish will result, and by simple treatment can be made ideal for dancing.



Types of Construction

There are a number of distinct types or systems of construction that have been developed for building concrete houses. Many of these are the subject of patent control which, however, relates solely to the system or method and does not necessarily add more than a trifling amount to the cost of the finished building. The

intending home builder should investigate the merits of various methods and systems before making a choice, so as to be able to decide which seems best to meet his requirements.

Briefly, the various systems are as follows:

1. A metal frame, resembling that used in a house built of wood, to which metal lath or fabric is fastened and the exterior covered with Portland cement stucco. Metal lath is also fixed to this frame on the interior, which is plastered with ordinary plaster. Partitions may be of metal frame and lath, like the exterior walls, or of hollow cement tile or other fireproof partition material. Floors and roofs may be solid slabs of reinforced concrete or may have metal joists, covered by thin reinforced concrete slabs. Metal lath is attached underneath the joists, then plastered.

2. Walls of concrete block or similar units, with partitions, floors and roof as in the preceding system. Walls, partitions, floors and roofs may be solid or hollow.

3. Walls, partitions, floors and roofs of monolithic concrete construction, reinforced where and as necessary. Such houses are built by depositing the concrete mixture into previously-erected forms of wood or metal.



4. So-called unit systems, which mean that slabs constituting walls

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and partitions, also columns and beams, are manufactured or precast at a place or in a plant arranged for the purpose, and after these units have been properly hardened they are brought to the building site and set in place in a very short time and at small expense. Walls, partitions, floors and roofs may be solid or hollow.



Hollow walls in concrete houses, regardless of how they may be secured, are quite desirable, since the air space so produced protects the interior of the house against sudden or extreme changes in

outside temperature — contributes to keeping the house cool in summer and makes it easier to heat in winter.

Free from damage without and within, sanitary to the utmost, vermin-proof, ratproof, cyclone-proof and fireproof, the concrete house or any other concrete structure is an asset in every sense of the word—imperishable security for the investor, speculator or owner.

We Will Help You

Before deciding upon the system or method of construction to use in building your house of concrete, tell us what you would like and we shall be glad to refer you to various companies publishing information on concrete houses; also, if desired, we will refer you to architects and engineers competent to plan the kind of house you want.



WHY TO BUILD THEM

The Portland Cement Association, 111 West Washington Street, Chicago, will be glad to send you, upon receipt of \$1, "The Concrete House and Its Construction," by Morris Sloan, Architect.

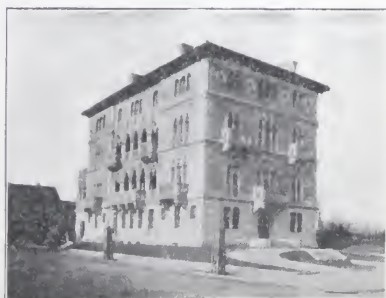


The following booklets may be obtained from the Portland Cement Association without charge:

Portland Cement Stucco
Concrete in the Country
Concreting in Winter
Concrete Tennis Courts

Concrete Septic Tanks
Small Concrete Garages
Concrete Feeding Floors, Barnyard Pavements and
Concrete Walks
Proportioning Concrete Mixtures and Mixing and
Placing Concrete
Concrete Foundations
Concrete Troughs, Tanks, Hog Wallows, Manure
Pits and Cisterns
Concrete Swimming and Wading Pools
Concrete Facts About Concrete Roads
Facts Everyone Should Know About Concrete Roads
That Alley of Yours

Note: We are indebted to the Trussed Concrete Steel Co., the General Fireproofing Co. and the Northwestern Expanded Metal Co. for some of the illustrations used in this leaflet.



"Concrete for Fire-Safeness"

**Why Build to Burn?
Build Safe.
USE CONCRETE.**

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